CCTV LCD Monitor

User Manual

For models:

EL-26MD2RE

EL-32MD2RE

EL-42MD2RE

Contents

1. Introduction.....1

2. Work Safety Information..... 2

2.1. Product Safety Precautions information.....2

2.2. Safety Guidelines.....3

2.3. Important Notice Concerning Power Cord Selection.....3

2.3.1 For the United States and Canada..... 4

2.3.2 For European Countries.....4

2.3.3 For the United Kingdom.....4

3. Standards and Guidelines.....6

3.1. FCC Requirements.....6

3.2. FCC Warning 6

3.3 CE Conformity..... 7

3.4 RoHS Compliance Statement..... 7

3.5 Information on Disposal for Your Old Product.....7

4. Hardware Installation.....8

4.1 Checking the Accessories Supplied.....8

5. Buttons and Connections.....8

5.1 Buttons.....8

5.2 Connections.....9

6. ID Remote Controller 10

7. OSD Setup 12

8. Troubleshooting Guide.....22

9. Applicable Video Timing for PC- analog Video.....23

10.Technical Data 24

11. Drawing & Dimension.....25

English

1 Introduction

Thank you for purchasing the professional CCTV LCD Monitor and welcome to a fantastic new technology that will completely change the way you look at monitors. The following sections describe just a few of the major advantages of this LCD monitor. You'll discover more of its wonderful features as you use it.

Please note that this manual is used with many similar monitor models. Please check the model number on the carton and on the back of the unit to make sure if the user manual is applicable to your machine.

1. The LCD monitor is used in the same way as the CRT monitor. There is no need to change the hardware of your computer, just plug it in and it is ready for use.

2. The monitor will accept and display analog video (NTSC or PAL) , PC-type video and Digital video(DVI, HDMI) sources .

3. Low radiation and reduced flickering compared to traditional CRT monitors that minimizes eyestrain and health hazards.

4. The compact size makes transportation easier and allows to use in many applications.

5. This LCD monitor can support PC-VGA, Composite , S-Video signals and Digital, DVI,HDMI SDI,signals.

6. The composite video input ports accept different signal sources, e.g. Camera, DVR .. etc.

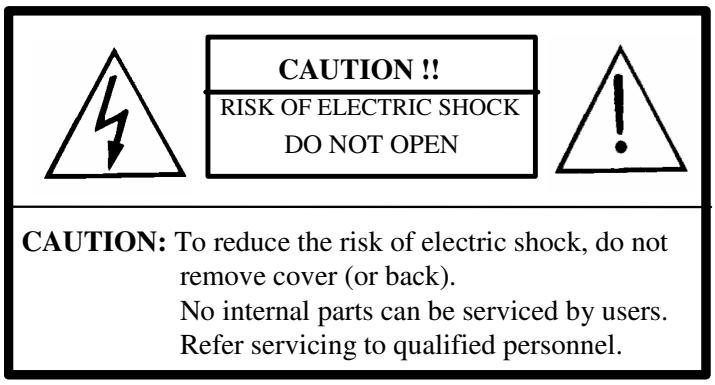
7. The design allows VESA wall mounting installation.

8 This monitor includes special functions for 3D comb filter, De-interlace, Anti burn-in mode, auto impedance switch for looping video connection .

9. The remote controller has 999 ID code to control individual monitor on the TV wall.

2 Work Safety Information

Caution and Warning


CAUTION !!
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: To reduce the risk of electric shock, do not remove cover (or back).
No internal parts can be serviced by users.
Refer servicing to qualified personnel.

WARNING	TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS CCTV LCD MONITOR TO RAIN OR MOISTURE.
	"HIGH VOLTAGE EXISTS ON THE BACK LIGHT POWER LEAD OF THIS CCTV LCD MONITOR. BEFORE SERVICING, DETERMINE THE PRESENCE OF HIGH VOLTAGE BY CONNECTING THE H.V. METER BETWEEN THE BACK LIGHT POWER LEAD AND CHASSIS ONLY"

2.1 Product Safety Precautions

Follow all warnings and instructions marked on the product.

1. Do not use this product near water.

2. This LCD monitor should be installed on a stable horizontal base.

3. When cleaning, use only a neutral detergent cleaner with a soft damp cloth. Do not spray with liquid or aerosol cleaners.

4. Do not expose this LCD monitor to direct sunlight or heat. Hot air may cause damage to the cabinet and other parts.

5. Adequate ventilation must be maintained to ensure reliable and continued operation and to protect the LCD monitor from overheating. Do not block ventilation slots and openings with objects or install the LCD monitor in a place where ventilation may be obstructed.

6. Do not install this LCD monitor near a motor or transformer where strong magnetism is generated. Images on the LCD monitor will be distorted and the color irregular.

7. Do not allow metal pieces or objects of any kind fall into the LCD monitor through ventilation holes.

8. Do not attempt to service this unit yourself. Removal of the LCD monitor cover may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

9. Unplug this product from the wall outlet and refer servicing to qualified service personnel in the event that:

- Liquid is spilled onto the product or the product is exposed to rain or water.
- The product does not operate normally when the operating instructions are followed.
- The product has been dropped or the cabinet has been damaged.
- The product exhibits a distinct change in performance, indicating a need for service.
- The power cord or plug is frayed or damaged.
- Has referred to Troubleshooting Tips and problems still can't be solved.

2.2 Safety Guidelines

⚠	**WARNING**	This device must be operated with the original power supply.
⚠	**CAUTION**	The socket outlet should be installed near the equipment and should be easily accessible.
⚠	**CAUTION**	Use a power cord that is properly grounded. Always use the appropriate AC power cord that is certified for the individual country. Some examples are listed below: USA……..UL Switzerland…….SEV Canada……CSA Britain……..BASE/BS Germany…..DE Japan……...Electric Appliance Control Act.

2.3 Important Notice Concerning Power Cord Selection

The power cord set for this unit has been enclosed and has been selected according to the country of destination. It must be used to prevent electric shock. Use the following guidelines if it is necessary to replace the original cord set, or if the cord set is not enclosed.

The female receptacle of the cord set must meet IEC-60320 requirements and may look like this (Figure A1 below):

Figure A1

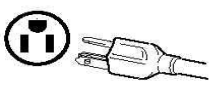


Figure A2

2.3.1 For the United States and Canada

In the United States and Canada the male plug is a NEMA5-15 style (Figure A2, above), UL Listed, and CSA Labeled. For units which are mounted on a desk or table, SVT or SJT type cord sets may be used. For units which sit on the floor, only SJT type cord sets may be used. The cord set must be selected according to the current rating for your unit. Please consult the table below for the selection criteria for power cords used in the United States and Canada.

Code Type	Size of Conductors in Cord	Maximum Current Rating of Unit
SJT	18 AWG 16 AWG 14 AWG	10 Amps 12 Amps 12 Amps
SVT	18 AWG 17 AWG	10 Amps 12 Amps

2.3.2 For European Countries

In Europe you must use a cord set which is appropriate for the receptacles in your country. The cord set is HAR-Certified, and a special mark that will appear on the outer sheath, or on the insulation of one of the inner conductors.

2.3.3 For the United Kingdom

For your safety please read the following text carefully.

If the fitted molded plug is unsuitable for the socket outlet, then the plug should be cut off and disposed of safely.

DANGER Do not plug the cut-off plug into a socket outlet! There is a danger of severe electrical shock!

If a new plug is to be fitted, please observe the wiring code as shown below. In case of doubt, please consult a qualified electrician.

WARNING This appliance must be earthed (grounded).

IMPORTANT

The wires in this mains lead are colored in accordance with the following codes:

- Green-and-Yellow : Ground (Earth)
- Blue : Neutral
- Brown : Live

the colored wires of the mains lead of this appliance do not correspond with the colored markings identifying the terminals in your plug, proceed as follows:

The wire which is colored GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked by the letter E or by the Earth symbol or colored GREEN or GREEN-AND-YELLOW.

The wire which is colored BLUE must be connected to the terminal in the plug which is marked with the letter N or colored BLACK.

The wire which is colored BROWN must be connected to the terminal in the plug which is marked with the letter L or colored RED.

If you have any questions concerning the proper power cord to use, please consult the dealer from whom you purchased the product.

3 Standards and Guidelines

3.1 FCC Requirements

This device complies with Part 15 of the FCC Rules and Regulations. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must tolerate any interference encountered, including interference that may cause improper operation.

The equipment has been tested and found to comply with the requirements stipulated in Part 15 of FCC regulations for a Class B digital device. These requirements are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in strict compliance with the instructions, may disrupt radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause detrimental interference with radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by taking one or more of the following measures:

- Reorienting or relocating the receiving antenna.
- Increasing the separation between the equipment and the receiver.
- Connecting the equipment into an outlet on a circuit different from the one which the receiver is connected.
- Consulting the dealer or an experienced radio/TV technician for help.

Shielded interconnected cables and shielded power cords must be used with this equipment to ensure compliance with the pertinent RFD emission limits governing this device.

Changes or modifications not expressly approved by the manufacturer could void the user's right to operate the equipment.

Notice of Compliance with Canadian Interference-causing Equipment Regulations

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

3.2 FCC Warning

To ensure continued FCC compliance, the user must use a grounded power supply cord and the shielded video interface cord with bonded ferrite cores provided. If a BNC cable is going to be used, use only a shielded BNC (5) cable. Also, any unauthorized changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this device.

3.3 CE Conformity

The device complies with the requirements of the directive 2004/108/EC with regard to “Electromagnetic compatibility”.

3.4 RoHS Compliance Statement

This display defined in this user manual is 100% RoHS complaint and meets all the requirements set forth in European Union Directive 2002/95/EC, Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment.

3.5 Information on Disposal for Your Old Product

Used electrical and electronic equipment must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment. When this crossed-out wheeled bin symbol is attached to a product, it means the product is covered by the European Directive 2002/979/EC. If you wish to discard of this product, please contact your local authorities and ask the correct method of disposal. The correct disposal of your old product will help prevent potential negative consequences for the environment and human health.

Attention: if you want to dispose of this equipment, please do not use this ordinary dust bin!

4. Hardware

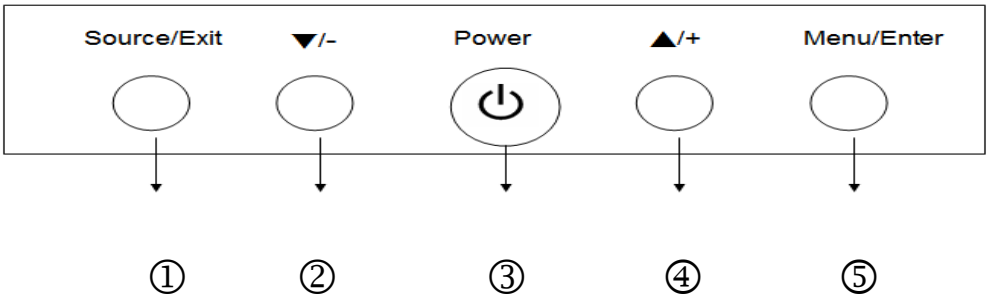
This chapter will guide you through the correct installation procedures for the LCD monitor.

4.1. Checking the Accessories Supplied

- LCD monitor body x 1 pc
- Desk Stand x 2 pc
- AC power cord x 1 pc
- D-Sub 15-pin cable (1.8 Meter) x 1 pc
- Ø 3.5mm audio line (1.5 Meter) x 1 pc
- User manual (CD) x 1 pc
- Remote Controller x 1 pc
- Battery (AAA) x 2 pcs

5. Buttons and Connections

5.1 Buttons



① **"Source/Exit"**

1. To select the input signal source when the OSD menu is Off. The available signal source will show in the following order: Video-1,Video-2, S-Video, VGA , DVI,HDMI ,SDI.
2. To exit the menu when you finish the setting.

② " **▼/-" Down/Decrease:**

To move the cursor downwards or to switch over the setting items or to decrease the figure of the setting selected.

③ ⏻ **" Power :**

Press button to turn the power on and press again to turn the power off.

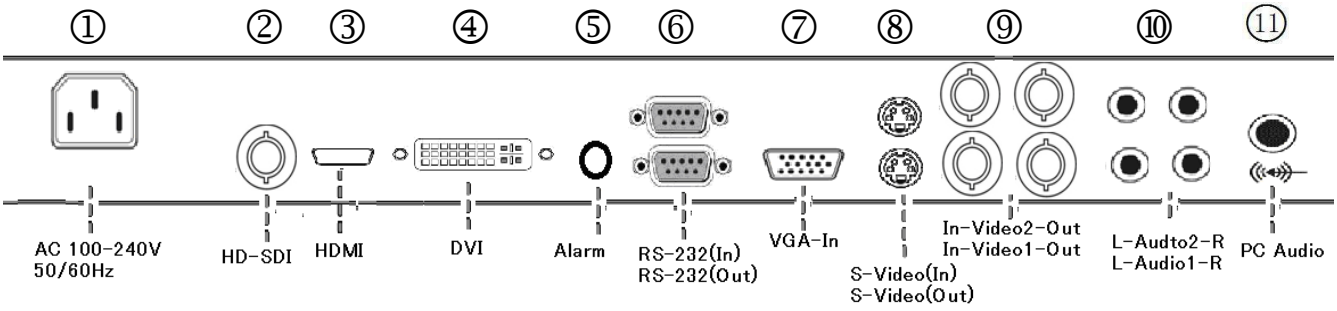
④.”▲/+” **Up/Increase** :

To move the cursor upwards or to switch over the setting items or to increase the figure of the setting Selected

⑤ **“Menu/Enter” :**

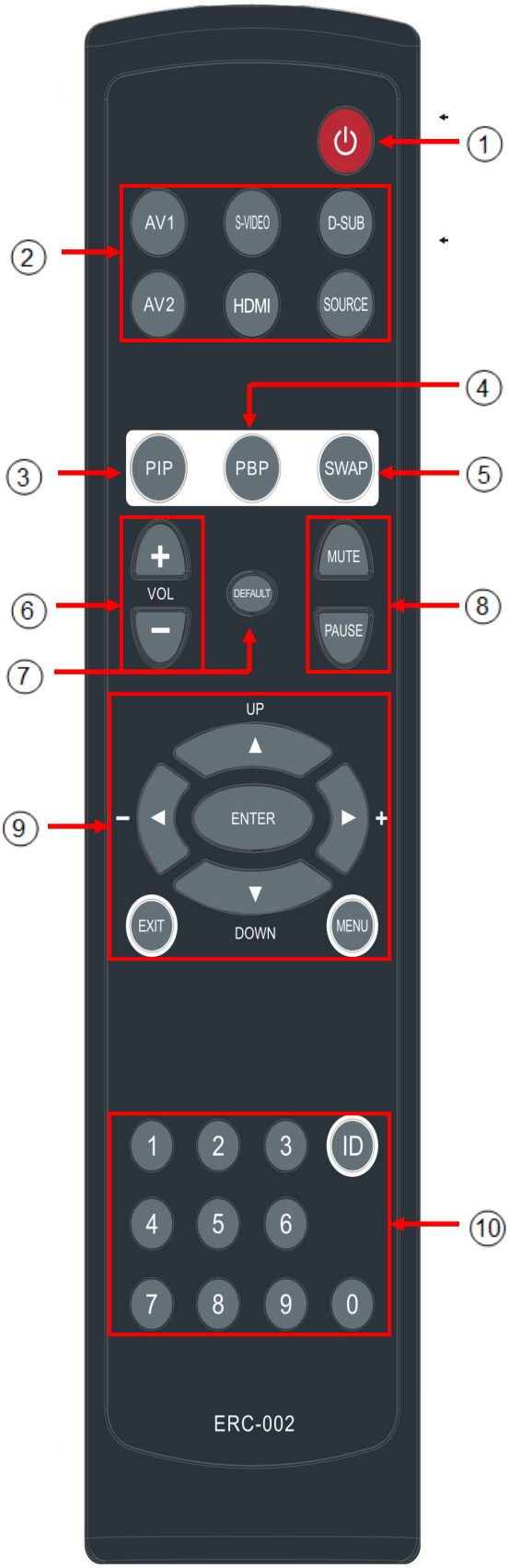
To enter the OSD menu or confirm the setting

5.2 Connections



Item	Connector	Function
①	AC 100-240V, 50/60Hz	Please use AC 100-240V, 50/60Hz Power
②	HD-SDI	Connect to the high definition digital video signals output of camera or DVR .
③	HDMI	Connect to the digital video signals output of computer or DVR through HDMI connector
④	DVI	Connect to the digital video signals output of computer or DVR through DVI-D connector
⑤	Alarm	Please connect the Ø 3.5mm Alarm cable to DVR alarm output and provide +3~5V DC Voltage to trigger the PIP, the sub screen will show the “Alarm Message” you setup on the DVR.
⑥	RS-232 (in/out)	Connect to PTZ controller to control the monitor and looping monitor.
⑦	VGA (in)	Connect to the VGA output of your computer or DVR
⑧	S-Video (In/out)	Connect the S-Video(4-pin DIN) connector from the DVR or AV equipment to the Monitor .
⑨	In-Video 1-Out In-Video 2-Out	This Video input and output are used for CVBS input and output. This monitor also supports the“ auto looping“ function, permitting the connection of another monitor from the output connector.
⑩	L-Audio 1-R L-Audio 2-R	Stereo audio input , “R“ is right channel (Red) of audio connector, “L“ is the left channel(White) of the audio of connector.
⑪	PC Audio	Connect to the audio output of your computer

6. ID Remote Controller



①. **POWER switch.**

Press to turn ON or turn OFF the LCD Monitor.

②. **VIDEO SIGNAL Selection:**

Press the “AV1”, “AV2”,“S-VIDEO”,“D-SUB”, “DVI/HDMI/SDI” , button to enter the selected video source or press the “SOURCE” button to have the cycle video selection.

③. **PIP Hot Key:**

Press PIP button to enter “PIP” setup.

④. **PBP Hot Key**:

Press PBP button to enter the PBP setup

⑤. **SWAP Hot Key**:

Press SWAP button to exchange the main and sub screen.

⑥. **VOL:**

Press “+” to increase volume and press “-“ to decrease volume.

⑦. **DEFAULT :**

Press “Default” to clear all the setting and return to factory default.

⑧. **MUTE and PAUSE :**

Press “MUTE” to mute the sound and press “PAUSE” to pause the video.

⑨. **OSD setup:**

a. Press the “MENU” to enter the OSD menu and press “ENTER” to access into item option, press “▲ UP” or “▼ DOWN” to select setting item and press “ENTER” again until Yellow bar changes to Pink bar. Press “ ▶ +” to increase or “ ◀ - ” to decrease the “pink bar” to adjust the setting.

b. Press the “EXIT” to exit the menu and confirm the setting.

c. Press the “ENTER” to confirm the ID number setting.

⑩. **ID and Number Key:**

Step 1: Setup the Monitor ID No.

Press "MENU" to enter the OSD menu and press " ▶/+ " button to select the "Function" menu and press "ENTER" to access into item option. Press "▼ DOWN" to choose "ID Controller " setup and press " ▶ +" or " ◀ - " again to switch to "ON"

To access into "ID" item and press "ENTER" to setup the "ID" No. Press 3 digit (001~999) as the monitor ID No. and press "EXIT" to confirm the input. When you press the "ID" button, the screen will show " Monitor ID : 001 (when you input " 001)

Step 2: Control the monitor with ID No.

Press "ID" button, the screen will show the" Monitor ID ": 001 input 3 same digit on " ID " and press "ENTER" to confirm the input. Then you can control the monitor.

For example:

When you setup the Monitor "ID" No" is "001", press the "ID" button and input 001 and press "ENTER" to confirm the input. You can control the monitor with Monitor ID No.001 only. You are not able to control other monitors unless you setup all monitors ID No. is "001" or the" ID Controller „ setup function is on "Off" status.

Notice !!!

Please don't setup the 3 digit No. as "000" , If you setup the Monitor ID No. as "000" , the ID function will be on "Off" status.

7. OSD Setup

Picture (Video / HDMI Mode)

1. Press the “Menu/Enter” key on the buttons to call out the OSD“ Menu” . Press “▲/+” or “▼/-“ to select “Picture” mode and press “Menu/Enter” key again to access into item option . Press “▲/+” or “▼/-“ to select item you want to adjust.

2. Various picture settings are available from the “Picture” menu. Use“▲/+” or “▼/-“ to select item that you want to adjust and press “Menu/Enter” key again until yellow bar changes to pink bar and press “▲/+” or “▼/-“ increase or decrease the figure that you wish . Press “Source/Exit” key to return to menu and confirm the setting. Press two times of “Source/Exit” to exit all the menu.

Contrast

Press “▲/+” or “▼/-“ to increase/decrease the “Pink bar” to adjust contrast. Increasing contrast will make white area of the video picture brighter. Contrast works in conjunction with “Brightness”.

Brightness

Press“▲/+” or “▼/-“ to increase/decrease the “Pink bar” to adjust brightness. Adjusting brightness to enhance the level of dark area in the video picture such as night scenes and shadow scenes. Increasing brightness will make dark areas more visible.

Tint

Press “▲/+” or “▼/-“ to increase/decrease the “Pink bar” to adjust hue. Using hue to adjust the color of flesh tones. Increasing figure will make the picture with more red in appearance. Decreasing figure will shift the picture with more green in appearance. (Remark). No tint adjustment under HDMI mode

Saturation

Press “▲/+” or “▼/-“ to increase/decrease the “Pink bar” to adjust color saturation. Increasing color figure will make the color more intense. Reducing color figure will make the color less intense.

Sharpness

Press “▲/+” or “▼/-“ to increase/decrease the “Pink bar” to adjust sharpness. Using sharpness to adjust the detail enhancement to the video picture. Increasing the figure will enhance the edges of objects in the video picture. Decreasing the figure will reduce enhancement.

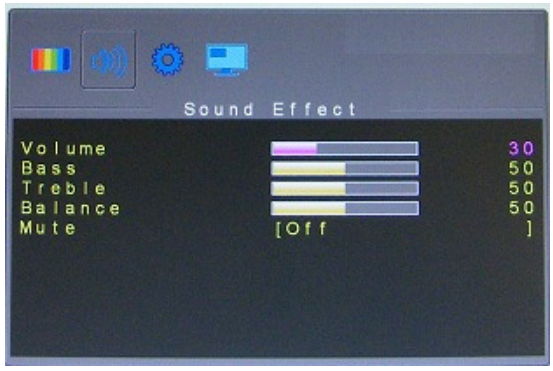
Backlight

Press “▲/+” or “▼/-“ to select “ High / Medium / Low / Min “ to adjust backlight. “High” level will make the backlight in most high light, the “Min” will minimize the backlight.

Color Temp.

Select the Color Temp.” for white balance. Press “Menu/Enter” to enter color temp. option. There are 4 settings to choose from (1)Standard (2). Warm (3).Cold (4) User. To select “User” you may press “▲/+” or “▼/-“ to increase/decrease the “Pink bar” to adjust color of Red, Green and Blue.

Sound Effect (Video Mode)



1. Press the “Menu/Enter” key on the buttons to call out the OSD Menu” . Press “▲/+” or “▼/-“ to select “Sound Effect” and press “Menu/Enter” key again to select the item you want to adjust.

2. Various sound effect settings are available from the “Sound Effect” menu. Use“▲/+” or “▼/-“ to select item that you want to adjust and press “Menu/Enter” key again until yellow bar changes to pink bar and press “▲/+” or “▼/-“ increase or decrease the figure that you wish . Press “Exit” key to return to menu and confirm the setting. Press two times of “Exit” to exit all the menu.

Volume

Just press “▲/+” or “▼/-“ to increase/decrease the “Pink bar” to adjust volume when item “Mute” is Off mode.

Bass

Press “▲/+” or “▼/-“ to increase/decrease the “Pink bar” to enhance the bass or reduce the bass.

Treble

Press “▲/+” or “▼/-“ to increase/decrease the “Pink bar” to increase the treble or reduce the treble.

Balance

Press “▲/+” or “▼/-“ to increase/decrease the “Pink bar” to enhance right speaker or enhance the left speaker. Put the figure on “0” will keep the balance of right speaker and left speaker.

Mute

Press “▲/+” or “▼/-“ to switch On or switch Off the mute function.

Function (Video Mode)

1. Press the “Menu/Enter” key on the buttons to call out the OSD “Menu” . Press “▲/+” or “▼/-“ to select “Function” Mode and press “Menu/Enter” key again to select the “Function” option.

2. Various function settings are available from the “Function” menu. Use“▲/+” or “▼/-“ to select item that you want to adjust and press “Menu/Enter” key again until yellow bar changes to pink bar and press “▲/+” or “▼/-“ increase or decrease the figure that you wish . Press “Exit” key to return to menu and confirm the setting. Press two times of “Exit” to exit all the menu.

Language

The default language is English, you may press the “Menu/Enter” key and press “▲/+” or “▼/-“ key to select language you want. There are 7 languages to select (1) English (2) French (3) Germany (4) Spanish (5) Italian (6) Russian (7). Chinese

Image Mode (Video mode)

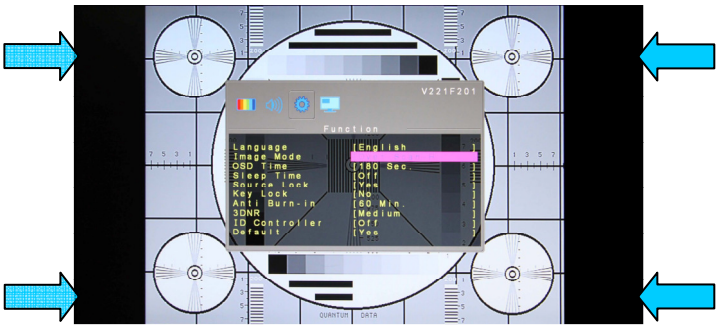
In order to meet different applications in video output, there are 5 image ratio to choose (1) Full Scan (2) Under Scan-V (3). Over Scan-H (4). Over Scan-1 (5). Over Scan-2. Press “▲/+” or “▼/-“ key to select the format ratio you want.

1. Full Scan
   The image fully fills up the screen on both “Vertical” and “ Horizontal” lines.

2. Under Scan-V
   The format is the “Letter Box” under scan mode that will create a black bar on both top and bottom of frame.

3.Over Scan-H

The format is the over scan mode that provide a true 4:3 format that will create a black bar on both right and left of frame.



4. Over Scan-1

The format is over scan mode to make the image fill up the 16:9 screen and cut about 3% on both “Vertical” and “Horizontal” lines.

5. Over Scan-2

The format is another over scan mode to make the image fill up the16:9 screen and cut about 6% on both “Vertical” and “Horizontal” lines.

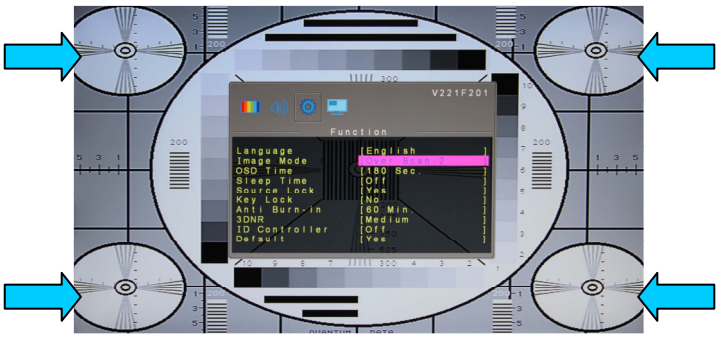


Image Mode (HDMI/SDI mode)

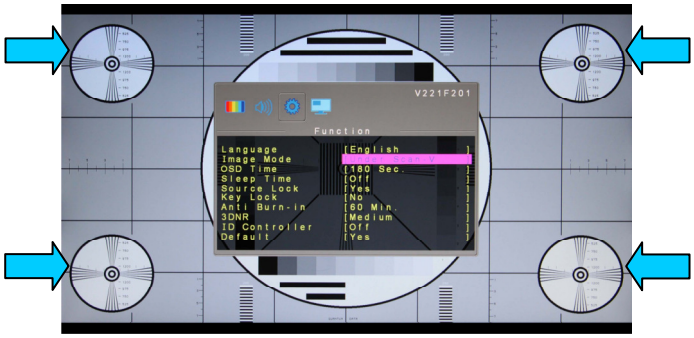
When HDMI as the video interface, there are 5 image ratio to choose (1) Full Scan (2) Under Scan-V (3). Over Scan-H (4). Over Scan-1 (5). Over Scan-2. Press “▲/+” or “▼/-“ key to select the format ratio you want.

1. Full Scan

The image fully fills up the 16:9 screen on both “Vertical” and “ Horizontal” lines.

2. Under Scan-V

The format is the “Letter Box” under scan mode that will create a black bar on both top and bottom of frame.



3. Over Scan-H
The format is the over scan mode that provide a 4:3 format that will create a black bar on both right and left of frame.

4. Over Scan-1
The format is over scan mode to make the image fill up the 16:9 screen and cut about 3% on both “Vertical” and “Horizontal” lines.

5. Over Scan-2
The format is another over scan mode to make the image fill up the16:9 screen and cut about 6% on both “Vertical” and “Horizontal” lines.

OSD Time

If you want the OSD Menu to stay longer on the screen, press “Menu/Enter” key and press “▲/+” or “▼/-“ key to select “OSD Time”, there are 4 time table to select (1) 30 Sec. (2) 60 Sec.(3). 90 Sec. (4) 180 Sec.

Sleep Time

The function will make the monitor in sleep mode to save the power when monitor is in standby mode. To press “Menu/Enter” to enter the option and press “▲/+” or “▼/-“ key again to select (1). 30 Min (2). 60 Min. (3).90 Min (4) Off. To select 30 Min that means the monitor will enter sleep mode when monitor is in standby mode for more than 30 Min. The other time options are the same rule.

Source Lock

The function will stop the signal auto scan process and fix the signal source you preferred. To select “Source lock” and press “Menu/Enter” and select “Yes” to activate the source lock function, select “No” will close the source lock function.

Key Lock

The function is to prevent from the kid's playing or mis-press to change the setting. Press "Menu/Enter" and select "Yes" to activate the key lock function, select "No" will close the key lock function.
If you want to release the Key Lock function you can press "Menu/Enter" and "Source/Exit" key simultaneously.

Anti Burn-in

The function can prevent the LCD panel from burn-in when camera or DVR is always displaying the same picture source at all times. Press "▲/+" or "▼/-" key to select " Anti Burn-in" and press "Menu/Enter" to enter the option and press "▲/+" or "▼/-" key again to select (1). 15 Min (2). 30 Min. (3).60 Min (4).90 Min (6).Off. To select 30 Min. the image will move left for one pixel for every 30 minutes, to select 60 Min, the image will move left for one pixel for every 60 minutes, the other options are the same regulation.

3D NR

To use 3D NR to reduce the noise level and improve the video quality. There are four levels to select (1) High (2) Medium (3) Low (4) Off. Press "Menu/Enter" and press "▲/+" or "▼/-" key to select the level.

ID Controller

The ID function is only applicable for some specific models, if the model you brought has the ID function, Please check the ID setup procedure on page 10.

Default

If you want to back to factory default, press Menu/Enter and then press "▲/+" or "▼/-" key to select " Default" " . Press "Menu/Enter" key and press to "▲/+" or "▼/-" key activate "Yes"

Multi Screen (Video Mode)

Press the "Menu/Enter" key on the buttons to call out the OSD "Menu" . Press "▲/+" or "▼/-" to select "Multi Screen" and press "Menu/Enter" key again to select the "Multi Screen" option.

Multi-Screen

There are 4 multi screen modes to select (1) PIP (2) PBP (3) PBP 4:3 (3) Off . You may press "Menu/Enter" and press "▲/+" or "▼/-" to select mode you want. "PIP" is Picture In Picture and "PBP" is Picture By Picture. The PIP or PBP doesn't allow the condition of Video on Video .

Main Screen

Press the “Menu/Enter” key to enter the Main Screen and press “▲/+” or “▼/-“ to select VGA/DVI as the main screen . When the main screen is in VGA/DVI mode, the sub screen can be Video-1/ Video-2/S-Video/ HDMI/SDI. But when select Video-1/ Video-2/S-Video/ HDMI/SDI as main screen, the sub screen will be VGA/DVI only.

Sub Screen

Press the “Menu/Enter” key to enter the Sub Screen and press “▲/+” or “▼/-“ to select VGA /DVI as the sub-screen . When the main screen is in VGA/DVI mode, the sub screen can be Video-1/ Video-2/S-Video/ HDMI/SDI.

Sub Screen / Main Screen	Video-1	Video-2	S-Video	VGA	DVI	HDMI	HD-SDI
Video-1	X	X	X	O	O	O	O
Video-2	X	X	X	O	O	O	O
S-Video	X	X	X	O	O	O	O
VGA	O	O	O	X	O	O	O
DVI	O	O	O	O	X	X	X
HDMI	O	O	O	O	X	X	X
HD-SDI	O	O	O	O	X	X	X

Sub Size

Press the “Menu/Enter” key to enter the Sub Size and press “▲/+” or “▼/-“ to select the size of sub-screen . There are 3 size to select (1).Small (2).Medium (3).Large

Sub Position

Press the “Menu/Enter” key to enter the Sub Position and press “▲/+” or “▼/-“ to select 1~5 as the position of sub-screen 1 : Top left 2: Top right 3: Bottom right 4: Bottom left 5: Central

Sound Source

To select the sound source is from Main Screen or Sub Screen. Press “▲/+” or “▼/-“ to select Main Screen or Sub Screen

Swap

Press “▲/+” or “▼/-“ key to enter the Swat . Press “Menu/Enter” and Press “▲/+” or “▼/-“ to activate “Yes” to swap the main screen and sub-screen.

Picture (PC Mode)

1. Press the “Menu/Enter” key on the buttons to call out the OSD“ Menu” . Press “▲/+” or “▼/-“ to select “Picture” mode and press “Menu/Enter” key again to access into item option . Press “▲/+” or “▼/-“ to select item you want to adjust.

2. Various picture settings are available from the “Picture” menu. Use“▲/+” or “▼/-“ to select item that you want to adjust and press “Menu/Enter” key again until yellow bar changes to pink bar and press “▲/+” or “▼/-“ increase or decrease the figure that you wish . Press “Exit” key to return to menu and confirm the setting. Press two times of “Exit” to exit all the menu.

Contrast

Press “▲/+” or “▼/-“ to increase/decrease the “Pink bar” to adjust contrast. Increasing contrast will make white area of the video picture brighter. Contrast works in conjunction with “Brightness”.

Brightness

Press“▲/+” or “▼/-“ to increase/decrease the “Pink bar” to adjust brightness. Adjusting brightness to enhance the level of dark area in the video picture such as night scenes and shadow scenes. Increasing brightness will make dark areas more visible.

Backlight

Press “▲/+” or “▼/-“ to select “ High / Medium / Low / Min “ to adjust backlight. “High” level will make the backlight in most light, the “Min” will minimize the backlight.

Color Temp.

Select the Color Temp.” for white balance. Press “Menu/Enter” to enter color temp. option. There are 4 settings to choose from (1)Standard (2). Warm (3).Cold (4) User. To select “User” you may press “▲/+” or “▼/-“ to increase/decrease the “Pink bar” to adjust color of Red, Green and Blue.

Clock

Use Clock to fine-tune the monitor when phase value is wrong. Press “Menu/Enter” and press “▲/+” or “▼/-“ to increase/decrease the “Pink bar” to adjust the Clock.

Phase

Use phase to fine-tune the monitor to perfectly ADC clock phase synchronize to the video signal source under RGB mode. Press “Menu/Enter” and press “▲/+” or “▼/-“ to increase/decrease the “Pink bar” to adjust the Phase.

H-Position

Use to change horizontal position of the picture. You may press “Menu/Enter” and press “▲/+” or “▼/-“ key to select “H-Position” . Press “▲/+” key to increase “Pink bar” to shift the picture to right or press “▼/-“ to decrease “Pink bar” to shift the picture to left.

V-Position

Use to change vertical position of the picture. You may press “Menu/Enter” and press “▲/+” or “▼/-“ key to select “V-Position” . Press “▲/+” key to increase “Pink bar” to shift the picture up or press “▼/-“ to decrease “Pink bar” to shift the picture down.

Auto Adjust

Use “Auto Adjust” to fine-tune the display to perfectly synchronize to the video signal source under RGB mode. Press “Menu/Enter” and press “▲/+” or “▼/-“ to activate “Yes” the Auto Adjust function.

Sound Effect (PC Mode)

The setup is the same as page No.13 for sound setup of “Video Mode”.

Function (PC Mode)

The setup is the same as page 14 for Function adjustment of “Video Mode”.

Image Mode(VGA-PC Mode)

When the signal is in VGA mode, there are 2 image ratio to choose (1) Full Scan (2) 4:3 Press “▲/+” or “▼/-“ key to select the format you want.

1. Full Scan
   The image fully fills up the 16:9 screen on both “Vertical” and “ Horizontal” lines.

2.4:3
   The format is the under scan mode that provide a true 4:3 format and there will be a black bar on both right and left of frame

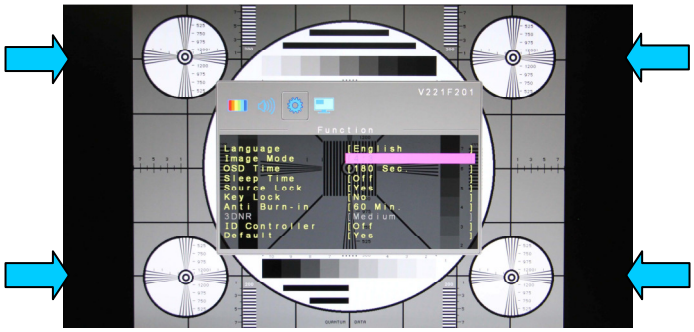
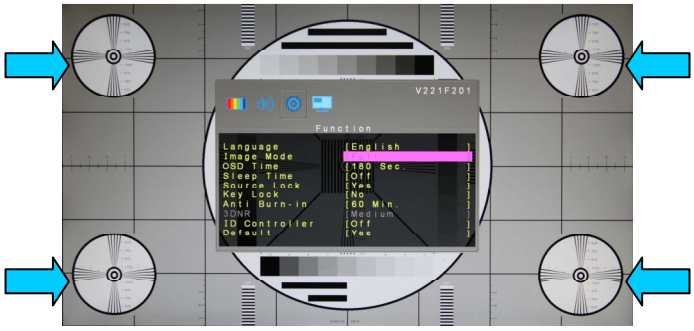


Image Mode(DVI/HDMI/SDI-PC)

When HDMI/DVI as the PC interface, there are 2 image ratio to choose (1) Full (2) 4:3 Press “▲/+” or “▼/-“ key to select the format you want.

1. Full
   The image fully fills up the 16:9 screen on both “Vertical” and “ Horizontal” lines to provide a true 16:9 format.

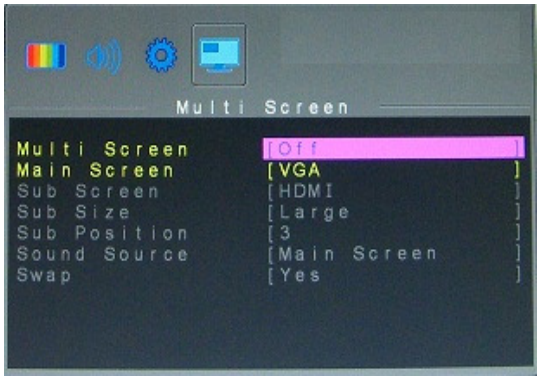


2. 4:3
   The format is the under scan mode that provide a 4:3 format and there will be a black bar on both right and left of frame.

Multi Screen (PC Mode)

The setup is the same as page

No. 17 for Multi Screen setup of “Video Mode”.



8. Troubleshooting Guide

When you experience issues with the CCTV LCD Monitor , before contacting your retailer where you made your purchase, please check the following items. The most common issue is with the connection of AV equipment or graphic card. We recommend that at the same time of troubleshooting, also refer to the AV equipment or graphic card user manual. Please do not use a higher refresh rate than the maximum specified by the CCTV LCD Monitor.

Issue	Troubleshooting
No image appears on the LCD Monitor screen	Check if the computer or AV equipment power cord is securely connected to the wall socket, or to the extension cord. Check if the LCD Monitor power switch is at the “on” position and the LED on the front of LCD Monitor is in still green. Check if the computer or AV equipment video (signal) cables are properly secured.
Abnormal image	Check and make sure the computer or AV equipment video (signal) cables are properly and securely connected to the sockets on back of the LCD Monitor.
Abnormal image colors on the screen	Check and make sure the LCD Monitor video (signal) cables are properly and securely connected to the VGA, BNC, RCA, S-Video, HDMI ,SDI sockets on back of the computer.
Interference appearing on the screen	Please refer to Chapter “Function” to check if there is any improper adjustment or setting.
Can only hear audio, but no image on the screen	Please make sure both video inputs are properly connected (BNC /RCA/ /S-Video/HDMI/SDI and VGA).
Can only see video, but no audio	Please make sure both audio inputs are properly connected, the audio input plugs are RCA and Ø 3.5mm audio line-in. Check if the volume is at the lowest level.

9. Applicable Video Timing for PC- analog Video

The following table list are the better display quality modes for analogy signal (PC) supported by this LCD monitor. The LCD monitor will stop working or has poor picture quality when other modes out of below list input.

VGA Mode timing :

Mode	Resolution	Refresh Rate (Hz)	Horizontal	Vertical	Nominal Pixel Clock (MHz)
			Nominal Frequency +/- 0.5 kHz	Nominal Frequency +/- 1 Hz	
DOS	720*400	70	31.469	70.087	28.322
VGA	640*480	60	31.469	59.940	25.175
	640*480	72	37.861	72.809	31.500
	640*480	75	37.500	75.000	31.500
SVGA	800*600	60	37.879	60.017	40.000
	800*600	72	48.077	72.188	50.000
	800*600	75	46.875	75.000	49.500
XGA	1024*768	60	48.363	60.004	65.000
	1024*768	70	56.476	70.069	75.000
	1024*768	75	60.023	75.029	78.750
XGA+	1152x864	75	67.500	75.000	108.000
SXGA	1280*1024	60	63.981	60.020	108.00
	1280*1024	75	79.976	75.025	135.00
	1360*768	60	47.712	60.015	85.500
	1280*720	60	45.000	60.000	74.250
	1920*1080	60	67.500	60.000	148.500

Note : 1360 x 768 for D-sub mode only

HDMI Mode Timing:

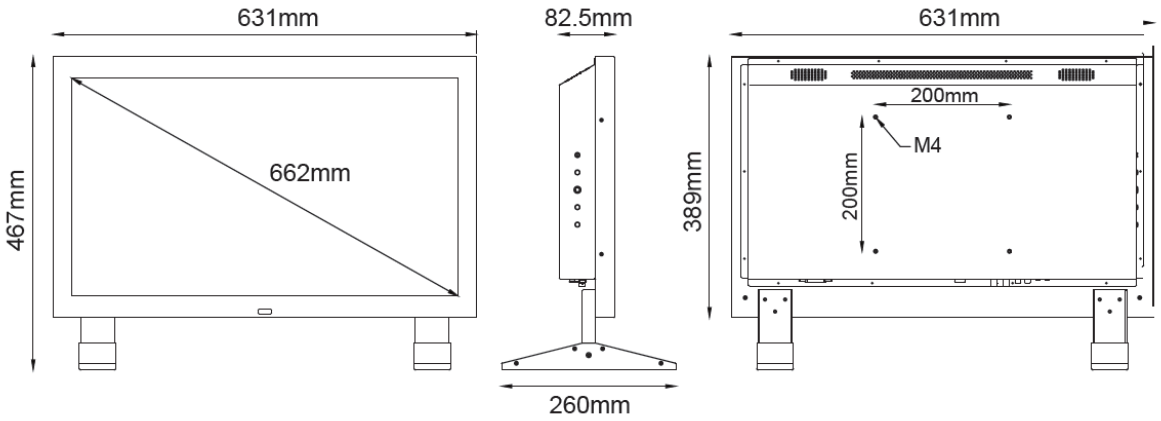
Model	Resolution	Horization	Vertical	Nominal Pixel Clock (MHz)
		Nominal Frequency +/- 0.5KHz	Nominal Frequency +/- 1 Hz	
CEA	720X480i-60	15.734	60.0	13.5
CEA	720X480P-60	31.5	60.0	27.027
CEA	1280X720P-60	45	60.0	74.25
CEA	1920X1080i-60	33.75	60.0	74.25
CEA	1920X1080P-60	67.5	60.0	148.5
CEA	720X576i-50	15.625	50.0	13.5
CEA	720X576P-50	31.25	50.0	27
CEA	1280X720P-50	37.5	50.0	74.25
CEA	1920X1080i-50	28.125	50.0	74.25
CEA	1920X1080P-50	56.25	50.0	148.5

10. Technical Data

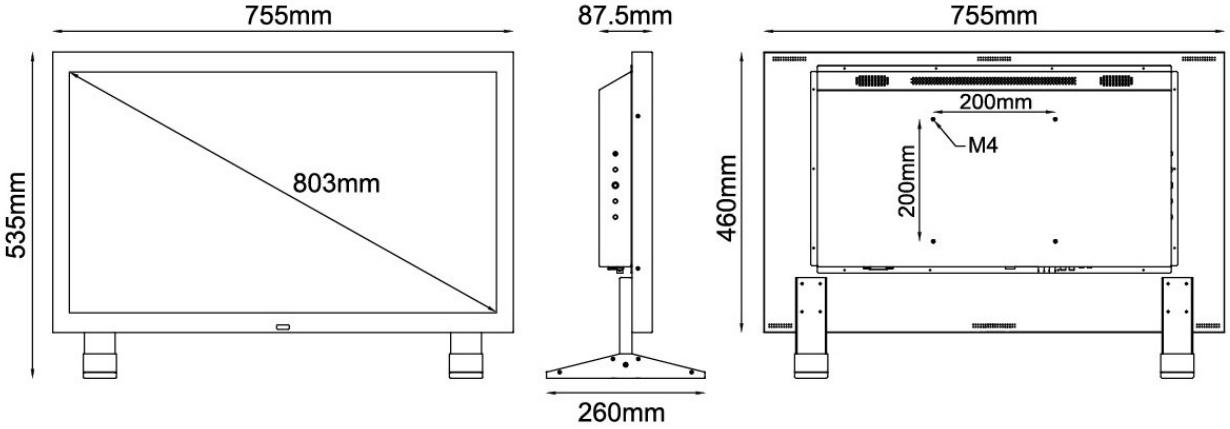
Model	EL-26MD2RE	EL-32MD2RE	EL-42MD2RE
System			
Panel Size	26" LCD	32" LCD	42" LCD
Backlight	LED, 60Hz	LED, 60Hz	LED, 60Hz
Resolution	1920 x 1080	1920 x 1080	1920 x 1080
Pixel Pitch (H xV)	0.3(H) x 0.3(V) mm	0.3637(H) x 0.3637(V)	0.4845(H) x 0.4845(V)
Contrast Ratio	1000:1	4000:1	4000:1
Luminance	400 cd/m2	400 cd/m2	400 cd/m2
Aspect Ratio	16:9	16:9	16:9
Response Time	Grey to Grey =8 ms	Grey to Grey =6.5 ms	Grey to Grey =6.5 ms
View Angel	U/D: 89/89 , L/R: 89/89	U/D: 89/89 , L/R: 89/89	U/D:89/89, L/R:89/89
Video Signal	Analog RGB Signal , 8 bit LVDS, composite signal 1.0Vpp/75 ohm, Y:1Vp-p, C:0.3Vp-p	Analog RGB Signal , 10 bit LVDS, composite signal 1.0Vpp/75 ohm, Y:1Vp-p, C:0.3Vp-p	
Video Color System	NTSC/PAL auto detection switch		
Scan Frequency	H:31K~81KHz, V:60~75Hz		
Operation Interfaces			
Front Panel Controls	Source/Exit, -/▼,+/▲, Power, Menu/Enter		
OSD Control	Yes		
OSD Language	English, Francais, Deutsch, Espanol, Italiano,Russian,Chinese(7)		
Input / Output Connector			
Input Connector	HDMI x 1 D-Sub (VGA) x 1 S-Video (In) x 1 Video Input(BNC) x 2 RCA Audio (R+L) x 2 sets Alarm Trigger(3.5mm Jack) x 1	HD-SDI x 1 DVI x 1 RS-232 (In) x 1 PC Audio Input x 1 Power Input (AC inlet) x 1	
Output Connector	Video Output(BNC) x 2 S-Video (Out) x 1 RS-232 (Out) x 1		
Mechanical & Electrical Design			
PIP & PBP	Yes		
Video Output Looping	Yes		
3D Comb Filter	Yes		
De-Interlace	Yes		
Power Failure Auto Recovery	Yes		
Anti Burn-in	Yes		
Alarm Trigger	Yes		
Source Lock	Yes		
3DNR (3D Noise Reduction)	Yes		
Pro 5 Image Ratio	Yes		
VESA Mounting	200 x 200 mm		
Front Bezel Material	Metal		
Back Cabinet Material	Metal		
Stand Material	Metal		
Speaker Output	5W x 2		
Power Input	AC 100~240V, 50/60Hz		
Power Consumption	80W(Max)	100W(Max)	120W(Max)
Working Temperature	5~+40 ℃		
Working Humidity	20% ~ 85%RH		
Unit Dimension(WxHxD)mm	631(W) x 467(H) x 260(D)	755(W) x 535(H) x 260(D)	993(W) x 659(H) x 260(D)
Packing Dimension(WxHxD)mm	738(W) x 586(H) x 312(D)	870(W) x 665(H) x 312(D)	1125(W) x 790(H) x 323(D)
Net Weight	10.7Kg	15.5Kg	20.5Kg
Gross Weight	13.0Kg	18.7Kg	25.7Kg
Regulatory	CE,FCC,RoHS		
Color	Black		

11.Drawing & Dimension

For Model No. EL-26MD2RE



For Model : EL-32MD2RE



For Model : EL-42MD2RE